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This application is a national stage completion of PCT/JP2004/002660
filed March 3, 2004 which claims priority from Japanese Application Serial No.
2003-56258 filed March 3, 2003.

Technical Field

6. (NEW) A fluid pressure apparatus provided with a fluid pressure pump driven by an electric motor and rotatable in two directions, both ports of a fluid pressure actuator and both ports of the fluid pressure pump being respectively connected through a pair of pipe lines;

wherein a sliding cavity is formed between an outer cylinder and an inner cylinder, and the sliding cavity is divided into a preload chamber and a tank chamber by a piston slidably inserted in the sliding cavity.

the tank chamber and the pair of pipe lines are connected through check valves respectively provided in directions so as to allow discharge from the tank chamber, and the tank chamber is preloaded with the air pressure introduced into the preload chamber;

and the fluid pressure pump is disposed in the inner cylinder.

7. (NEW) The fluid pressure apparatus according to claim 6, wherein the fluid pressure pump is a swash plate piston pump.

8. (NEW) The fluid pressure apparatus according to claim 6, wherein the outer cylinder and the inner cylinder are arranged coaxially with a rotating shaft of the electric motor, and the outer cylinder and the inner cylinder are mounted on the electric motor.

9. (NEW) The fluid pressure apparatus according to claim 6, wherein the tank chamber communicates with the inside of the inner cylinder.

10. (NEW) The fluid pressure apparatus according to claim 6, wherein a top end of the rotating shaft of the electric motor is rotatably supported by a lid member closing one end of the outer cylinder and one end of the inner cylinder.